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Understanding E-Government Implementation from an NPM Strategic Reform Perspective

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Abstract:

New Public Management (NPM) is a set of private sector management principles which have had a significant impact in the shaping of policy reform agendas in many governments. This article seeks to understand the influence of NPM in a public management reform context and explore the resulting practical and theoretical implications of NPM for e-government. In doing so, this article develops a benefits framework in order to analyse the extent to which NPM has contributed to the attainment of e-government goals. Two case studies are presented detailing the implementation of e-government initiatives in Ireland. Each case provides a differing perspective on the influence of the modernisation agenda in Ireland and the attainment of e-government benefits. Finally, the study provides insightful discussion on the impact of NPM reform initiatives on the success of e-government and the inherent organisational and social challenges.

Keywords: e-government, IS Implementation, public sector, comparative case analysis

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I. INTRODUCTION

A current issue in the e-government field is the distinction between those studies that are motivated by prescription, in that they attempt to define normative strategies for action and those that seek to explore and measure the dynamics of implementing e-government. Critical to studies that seek to understand the determinants of success in e-government implementation is the development of a more fundamental understanding of the process of public sector modernisation and consequently the behaviour of public sector bodies. New Public Management (NPM) is a set of influential ideas that have shaped the motivations of policy reform agendas in most developed countries [Lapsley, 2009]. In tandem, governments have been encouraged by international organisations, such as the EU and the OECD, to aspire to broad goals of e-government that include improvements to the quality of service delivery, the efficiency of the administrative function and improvements to democratic processes (Commission of the European Communities, 2003). This article seeks to understand the influence of NPM in a public management reform context in order to explore the practical and theoretical implications of NPM for e-government and to explore to what extent NPM has contributed to the attainment of e-government goals.

Thus far research on e-government has concentrated mainly on the impacts of technology in public administration without considering the wider context of the motivations for policy reform. This article contends that an awareness of the influence of NPM on the e-government reform context increases our understanding of e-government implementation challenges and outcomes. The article identifies certain important NPM components, which acted as a precursor to e-government initiatives in Ireland and that consideration of these doctrinal NPM components can provide a more insightful and holistic understanding of e-government development and implementation issues. This article provides a platform for assessing what impact NPM has had on the implementation of two e-government projects in Ireland. In doing so, this article attempts to provide empirical evidence to increase our understanding of the influence of NPM on the overall achievement of e-government success.

The contribution of this article, therefore, is its consideration of the connection between NPM and the achievement of e-government goals. The findings show that in Ireland the e-government change agenda was preset by NPM doctrines, and e-government policy was heavily influenced by NPM practices. The article utilises a framework suggested by Lau [2006] to analyse the success and failure of e-government initiatives in Ireland. Critically, the article identifies the limitations of NPM in assisting in implementation of cross-departmental e-government initiatives and considers the limitations of this approach in its inability to comprehensively account for social or public values in service delivery initiatives. The article also contributes to the growing literature on e-government through the development of an NPM framework that can be used to identify NPM features in the development of reform policies and thus analyse the relative success of their impact in other reform contexts. The article is structured as follows. First, this study reviews the theoretical development of New Public Management (NPM) and identifies the subsequent emergence of e-government. Then e-government goals and the challenges in evaluating e-government projects are outlined. Second, the research framework and resulting methodology are presented. Third, a review of international NPM reforms is presented as a precursor to an in-depth consideration of the political and social context of reform in Ireland. Next, components of NPM in Ireland are described followed chronologically by the emergence of e-government in Ireland. Two case studies are presented and the findings discussed according to e-government goals. Discussion and conclusions are then drawn from the study followed finally by some remarks on limitations of the study, suggestions for further research and implications for practice.

II. THEORETICAL BACKGROUND

New Public Management (NPM)

A significant conceptual shift has occurred in public administration, from a controlling bureaucratic administration, to one focussed on creating an efficient and responsive organisation [De Araújo, 2000; Denhardt et al., 2000; Pollitt, 2000]. The emphasis of reforms has been on reshaping the boundaries and responsibilities of the state, especially through privatisation, the citizen-centred restructuring of public services and the adoption of private sector disciplines [Barzelay, 2001; Minogue, 1998]. However, private sector disciplines cannot simply be superimposed on the public sector, as many services are provided for the benefit of society as a whole and view the individual as a citizen, not a customer [Ciborra, 2005; Mintzberg, 1996]. Thus, the development of government is challenged with balancing the needs of individual citizens with wider concerns. This has resulted in the search for models that combine the best features of the traditional perspective of administration with modern business theory and practice; this is often referred to as the *third way* [Gunn, 1988; Mintzberg, 1996; Osborne et al., 1992].

Central to modernisation programmes that have dominated reforms since the 1970s, is the influential model of New Public Management (NPM) [Aucoin, 1990; Barzelay, 2001; Minogue et al., 1998; Pollitt, 1990]. The objective of this model has been on reshaping the boundaries and responsibilities of the state, especially through the citizen-centred restructuring of public services achieved through the adoption of private sector practices (Wright 1996; Yeatman 1994). There is an “onus on the professional public sector manager to deliver a quality product efficiently, and without performance measurement this is not likely to happen” [Faucett et al., 1994, p. 70]. The NPM approach seeks radical improvements to public service delivery through the development of information technology [Hood, 1995b; Thompson, 1997]. Although the implementation of NPM ideas did not envisage the radical technological innovations, which today are referred to as e-government, it nonetheless set the stage for the meeting of two apparently disparate developments. This meeting occurred in the mid 1990s.

Whilst there is no single accepted explanation or interpretation of why NPM came about when it did, there are quite a lot of similarities in the accounts of what NPM involves: a shift in emphasis; a new focus on the customer; a response to increased complexity, uncertainty and expectations; a structural and managerial dimension; key doctrinal components; and the increasing use of an array of private sector management techniques [Hood, 1991; Hood, 1995a]. Barzelay and Armajani [1992] describe NPM as a wave of reform. Hood [1991, 1995a] considers it a response to increased social and cultural complexity, uncertainty and expectations of government. Hood [1991] and others regard NPM as a shift in emphasis to a customer-driven and service-oriented public sector [Boston et al., 1996; Ferlie et al., 1996; Pettersen, 2001]. NPM may also be viewed as consisting of components or dimensions: a structural dimension involving the disaggregation of organisations; and a managerial dimension involving more visible management, increased use of private sector styles of management, stricter cost control, explicit measurement/quantification, greater accountability and an emphasis on output controls rather than process [Perrott, 1996; Pollitt, 2000]. Implementation of NPM ideas has involved the greater use of a number of techniques: cost improvement programmes, performance indicators, financial management information systems, financial targets and delegated budgets [De Araujo, 2000].

However, there are critics of NPM who argue that government activities cannot be managed in the same way as private sector activities. Mintzberg [1996, p.79] identifies three key assumptions underlying the private sector view of management which cannot be upheld for public sector management: whether particular activities in the public sector can be isolated from one another and from direct authority; secondly, whether or not performance can be fully and properly evaluated by objective measures; and thirdly whether activities can be entrusted to autonomous professional managers who will be held accountable for performance. His greatest difficulty is with the “myth of measurement”, suggesting that many of the benefits of government activities do not lend themselves to measurement in cost terms and that these activities are in the public sector precisely because of measurement problems [Mintzberg, 1996, p. 79]. Measurement in public sector organisations must serve many purposes—the operational needs of employees and the periodic control needs of those at higher organisational levels. In addition, “the inability of existing information systems to provide necessary data in a valid, reliable, timely and cost effective manner” mitigates against the use of information for accountability and performance evaluation in the public sector [Cavalluzzo et al., 2004]. Yet the performance measurement industry has grown at a fast pace [Johnsen, 2005] although not without its critics who argue that most often it fails to achieve its purpose [Modell, 2004].

The essential nature of the public sector further creates difficulties in balancing the need for efficiencies with measures of effectiveness. It has long been argued that measurement must include an assessment of quality in addition to the more traditional efficiency measures at the operational level where quality is actually delivered [Adnum, 1993]. Public sector management reforms must constantly tread a line between searching for ways to increase efficiency on the one hand whilst keeping in mind public interest on the other [Kettl, 1997; Lapsley, 2008].

However, it is argued that Government is overlooking its social democratic role as it becomes more concerned with managing its role using elements of recognised global public sector reforms [Bardouille, 2000; Selle et al., 2006]. Moreover, it is suggested that evolving control frameworks under NPM are weakening the priority given to equity concerns in policy design and implementation [Landry, 1993; Selle et al., 2006; Van Wart et al., 1999]. This conflict between social democratic considerations on the one hand, and the drive for increased efficiencies on the other, is at the heart of debates over public sector management reforms.

E-Government

Electronic government consists of using technology, particularly the Internet, as a means to deliver services to citizens, businesses and other entities [Gronlund et al., 2004; Watson et al., 2001] with the purpose of providing convenient access to government information and services [Brannen, 2001; Ho, 2002]. From this viewpoint e-government has the potential to transform not only the way in which most public services are delivered but also the fundamental relationship between government and citizen (Bannister et al., 2002; Watson et al., 2001). The EU defines e-government as:

the use of Information and Communication Technologies (ICTs) in public administrations combined with organisational change and new skills in order to improve public services and democratic processes and strengthen support to public policies.

Commission of the European Communities [2003]

There are some who see e-government as the next phase in the rationalisation and reform of the public sector [Fountain, 2001; Heeks, 1999]. The trend towards the adoption of e-government represents a continuation of previous public sector reforms, but critically includes a substantially increased role for information and communication technology [Heeks, 1999; Li, 2003]. Several studies have empirically identified the importance of NPM reform initiatives and e-government, highlighting the transformation of service-based processes and citizen-centric service delivery as key e-government components of these administrative reform policies [Kudo, 2008; Saxena, 2005; Torres et al., 2005a; Torres et al., 2005b]. Further, some authors have identified NPM as having laid important conceptual foundations for the development of e-government [Davison et al., 2005; Homburg, 2004; Hughes et al., 2004].

Technology was first included as a component of mainstream public administrative reform in the early 1990s but it was through the substantial impact of the Internet in the late 1990s that the potential of information and communications technology (ICT) was perceived as a vehicle and stimulus of more fundamental reform. These reform objectives were strongly influenced by private sector management practices and envisaged improved accountability in Government, more convenient access for *customers*, greater internal efficiency and increased levels of productivity. This vision of a more responsive public sector was founded on strategies that highlighted innovation and entrepreneurship and that seek to promote joined up government through sophisticated process integration [Torres et al., 2005a; Yildiz, 2007]. International bodies such as the EU have further increased pressure on national governments to participate in this reform agenda by producing statistics ranking development based on benchmarking criteria [Bannister, 2008; Common, 1998; Dolowitz et al., 1998].

Criteria used in these studies generally relate to e-government development models such as Layne and Lee [2001] and encourage progression through various stages of interaction with the citizen and process integration among service providers. The ultimate objective of these models is to arrive at transactional interaction with the citizen and full horizontal and vertical process integration among service providers. Within this discourse the rhetoric of “re-engineering,” “reinvention,” and “entrepreneurship” were central in defining the modernisation ethic [Homburg, 2004]. These models have been criticised however, as overtly technical and deterministic in nature, oversimplifying what is a highly complex social and organisationally challenging task [Anderson et al., 2006; Cordella, 2007; Yildiz, 2007].

E-Government Evaluation

Within e-government research there has been a growing concern to develop methods for the effective evaluation of the performance and success of e-government projects [Goldfinch, 2007]. Heeks and Bhatnagar [1999] for example provide a factor-based checklist of failure factors and more recently studies have focused on issues such as performance measurement [Gupta et al., 2003; Mitra et al., 2008] and the importance of evaluating e-government projects from a political, economic and social perspective [Irani et al., 2005; Irani et al., 2008; Jones et al., 2006]. Most of these studies have at some level addressed the issue of measuring both tangible and intangible benefits of e-government. Traditional evaluation techniques used in the private sector, such as Cost Benefit Analysis (CBA), Net Present Value (NPV) and Return on Investment (ROI), have been criticised as overly restrictive on e-government initiatives, as intangible benefits or the “public value” of e-government projects can be difficult to quantify and hence measure [Eyob, 2004; Irani et al., 2008].

Concerns have also been raised over fundamental differences that exist between private and public sector organisations [Collins et al., 2002; Mintzberg, 1996; Rainey et al., 1976]. In particular the use of technology for the creation of *value* is a process that carries different meanings in profit and not-for-profit sectors. Within the e-government context, the notion of public value argues that the most important challenge for e-government policy makers is to go beyond matters of efficiency and economic gains and include social objectives such as trust, social inclusion, community regeneration and sustainability, as prime goals of e-government [Grimsley et al., 2007]. Thus, it is argued, the range of social and organisational factors found in e-government projects render traditional private-sector methods inadequate, as intangible benefits intended to contribute to the public good are incompatible with rational approaches to traditional budgeting [Bannister, 2001; Irani et al., 2005; Irani et al., 2008].

The tension between delivering effective public services and gaining procedural efficiencies has been noted in prior research, with some improvement identified in service provision but potentially at the cost of a less equitable service [Batley et al., 2004]. Public sector agencies should not only seek to improve the quality of their services and the efficiency with which they are delivered, but also gain improvements in democratic processes, including access,

accountability and transparency [Commission of the European Communities, 2003]. In order to achieve the latter, the importance of the traditional bureaucratic organisation, as a bastion of equality and impartiality, has been highlighted in contrast with the market-based efficiencies contained in NPM motivated initiatives that are argued to focus predominantly on efficiency gains [Cordella, 2007]. This challenge, present in NPM reform initiatives, has important implications for example, in the ability of marginalised groups in society to be equally recognised alongside more powerful social partners [Aberbach et al., 2005].

The customer-driven concept is core to NPM influenced initiatives and in the private sector assumes that an organisation will identify a preferred customer to whom efficiencies can be delivered and individual preferences accounted for. This has been identified by numerous studies as fundamentally misaligned to the mandate of the public sector, which exists to serve all citizens with impartiality and to ensure equity [Ciborra, 2005; Helbig et al., 2009]. In relation to the digital divide, Fountain [2001] raises explicit concerns that enacting technology with a customer focus could bring serious consequences for society, beyond simple inequality of access to services.

Against this backdrop, Lau [2006] presents a useful matrix for defining and measuring e-government benefits (see Table 1). Beneficiaries of e-government initiatives are defined as Government and Non-Government—Citizens and Businesses—with the type of benefit ranging from direct financial and direct nonfinancial to indirect good governance.

Table 1: E-Government Benefits		
	Government	Non-government stakeholders
Direct financial costs and benefits	Reducing costs; increasing value of services	Reducing administrative burden; better services and improving equity
Direct nonfinancial costs and benefits	Synergies across service channels; sharing and reuse of data, promoting access	User satisfaction; improving access, transparency and equity
Indirect costs and benefits “Good Governance”	Modernisation and transformation; ensuring equity, accountability and participation	Creating an information society; establishing an infrastructure for secure and reliable transactions
Source: Lau 2006.		

This approach is a useful framework for assessing e-government success as it explicitly accounts for multiple stakeholders and seeks to identify a broad range of costs and benefits encapsulating the three fundamental goals of e-government—quality services, improved administrative efficiency and improved democratic processes [Commission of the European Communities, 2003].

Within this field of study Yildiz [2007] calls for research that seeks to understand the political and social dimension of e-government initiatives. This study, therefore, aims to extend the empirical recognition given to NPM by using a more theoretically developed position to connect e-government research to public administration and hence to understand the impact of NPM on the achievement of success in e-government.

III. RESEARCH OBJECTIVES AND METHODOLOGY

This article intends to analyse how specific doctrinal components of NPM have influenced the development of e-government and e-government project implementation. Two sample e-government projects are used to evaluate the extent to which NPM contributed to or impeded the achievement of e-government goals. An examination of the literature on NPM suggested the reoccurrence of a number of key themes: restructuring; a customer focus; a move to greater use of private sector styles of management; and an increased concern with performance measurement and efficiencies. These themes were examined in the context of the two case studies. These NPM features were then cross referenced with the Lau [2006] framework in order to determine the type of benefit accruing from the initiative and the outcome of the benefit. This process enabled an evaluation of the overall impact of these sample initiatives from the perspective of e-government goals as defined by the EU—namely, that improvements should be gained in the quality of services, the efficiency of administrative operation and the improvement of democratic function.

The authors use extensive field data collected over a number of years relating to two case studies: the first involves the development of online services in the Irish Revenue, and the other examines the development of the Public Services Broker, an online portal that was designed to provide a single point of access to e-government services. This article examines the development of these initiatives and highlights areas where NPM has had an identifiable

impact on strategy and the implementation of that strategy and provides an assessment of the extent to which NPM influenced the reform context in which e-government emerged. The article then evaluates the impact of NPM on the successful achievement of e-government goals. The lessons learned from this exercise will inform practical e-government strategy formulation and give a useful theoretical insight into the impact of NPM on e-government initiatives.

This exploratory study is interpretive in nature in that it seeks to examine two e-government reform initiatives, using an in-depth case study approach. The study of the development and implementation of information systems requires an appreciation of the impact of social and political factors [Kling, 1978; Markus, 1983] and the inclusion of important organisational features relating to historical and cultural contexts [Klein et al., 1999; Myers, 1994; Orlikowski et al., 1991; Pouloudi et al., 1997; Walsham, 1993; Walsham, 1995a; Walsham, 1995b]. The focus of this approach has been identified as pertinent to studying the phenomena of e-government, where social and political factors interact in a complex, dynamic environment [Chan et al., 2003; Watson et al., 2001]. As such, the research approach used in this study broadly fits within the qualitative, interpretive paradigm. This approach has been identified as the optimum style of research for increasing our understanding of the critical organisational issues related to information systems implementation [Walsham, 1993].

This study gathered data from a variety of sources including semi-structured interviews, observations and internal and external documentation. A total of fifteen interviews were used to extract primary data representing key stakeholders in e-government in Ireland. These included: the Director of the Information Society Policy Unit from the Department of An Taoiseach (Prime Minister); interviews with the assistant director and a senior business analyst from the Reach agency; the assistant director of the Local Government Computer Supply Board, six IT Managers/Directors and five County Council Managers representing six local authorities. Interviews lasted between two and four hours, records were kept of the content of all interviews and further clarifications and updates were obtained by further interviews, e-mail and telephone contact. Both internal and external reports and documentation were collected and analysed.

IV. INTERNATIONAL PUBLIC SECTOR REFORM CONTEXT

Public sector reform is a global occurrence/paradigm [Aucoin, 1990; Bardouille, 2000; Borins, 1997; Guthrie et al., 1999; Kettl, 1997; Kickert, 1997; Olson et al., 1998; Pollitt et al., 2000; Torres et al., 2002; Yeatman, 1994]. Similar public sector reforms appeared in countries with varying political and economic systems, such as the United States, Korea, the United Kingdom, Portugal, France, Brazil, Australia, Sweden, New Zealand and Canada [Kaboolian, 1998; Torres et al., 2002]. The public sector reforms that took place in Australia during the 1980s were dominated by the philosophy of managerialism [Parker et al., 1990]. In Australia, the emphasis was on improving the skills of its key resource, its people, through training and reshaping the civil service system to encourage performance [Kettl, 1997]. The gradual and continuous change process there is in contrast to the more radical and rapid changes driving the New Zealand and UK reforms. In 1988, New Zealand abandoned its rule-bound civil service system [Pallot, 2003]. Large departments were split up into smaller units focused on a specific mission and guided by output budgets [Osborne, 2000]. NPM reforms there held fast to certain elements of related theories—public choice theory, principal-agent theory, and transaction cost analysis [Boston et al., 1996; Kettl, 1997; Pallot, 2003].

In the 1990s, the UK introduced over one hundred agencies into their public administration system, each with a performance agreement and greater operating flexibility. Structural change arising from NPM reforms has inculcated a business ethos in agencies and has led to the development of a business culture [Humphrey et al., 1998; Lapsley, 1997; Lee et al., 2002; Torres et al., 2004]. In the UK, performance related pay was introduced in the public sector in 1985 and the focus on the customer increasingly moved from the periphery of the organisation's concerns to the centre. This new emphasis on the customer, injected quality of service as a key area of focus into organisations' performance standards.

Reforms have been adopted in different ways in the US and Canada. The US has adopted parts of both "let the managers manage"¹ model and parts of "make the managers manage" model (phrases coined by Donald Kettl, 1997) with as a result a divided focus [Kamensky, 1996]. In Canada the public service is trying to do more with less by "desperately attempting to restructure, delay, re-engineer and reinvent itself in the name of efficiency" Bardouille [2000].

NPM reforms in EU countries have adopted various approaches. In some cases there has been a transfer of the management of public service provision and public utilities to the private sector. Privatisation of public utilities

¹ Donald Kettl, "The global revolution in public management: Driving themes, missing links," *Journal of Policy Analysis and Management* 16:3 (Summer) 1997, pp 446–462.

constitutes a particularly important part of the restructuring program of the public sector in Austria, Belgium, Finland, France, Germany, Norway, Sweden and the United Kingdom. Concerns with efficiency, effectiveness and value for money are of particular interest to Anglo Saxon countries and the Netherlands. Torres and Pina [2002] note how in these countries the citizen is seen as a consumer of services and viewed as a customer. In the Nordic countries, concern centres around meeting citizens' needs. There is a distinctive tradition in these countries of consultation and negotiation and the primary concern is to satisfy citizens' wishes [Torres et al., 2002].

Bardouille [2000] considers OECD countries to be likely to continue to "inculcate the NPM doctrine into their public service institutions and policy cycles." This is despite the fact that giving primacy to cost considerations is likely to mean a less than equitable distribution of resources. Moreover, Bardouille [2000] argues that the pursuit of such policies is in recognition of the economic fact that globalisation is built on competition and that in order to survive in an increasingly competitive environment, efficiencies have to be sought out and built into government ways of doing business. It has been recognised that there are further operational benefits to be gained by the use of electronic service delivery, with the aim to improve the efficiency and effectiveness of the functions of government and these are also powerful forces driving public sector modernisation [De Araújo, 2000]. NPM and e-government can be viewed as distinct activities with each one reinforcing the other [Criado et al., 2002]. As Schedler [2001] observes "the soil for e-government has been made fertile by reforms such as NPM."

The importance of context to the study of NPM reforms is critical given that "the indiscriminate export of hand-me-down public management reform initiatives may stifle appropriate variety in public sector policy response" [Hood, 1995a]. NPM does not simply involve the importation of an NPM toolkit for successful implementation of reforms. Pollitt [2003] argues that the success or failure of public sector reform depends to a large extent on the functional and contextual knowledge available at the implementation of reforms. He argues that "a technique or organisational structure which succeeds in one place may fail in another" [Pollitt, 2003]. Therefore, an understanding of the social and organisational context is also important and is provided below.

Public Sector Reform Context—Ireland

In Ireland, Governmental institutional structures and practices remained predominantly the same from the foundation of the state in 1922 until the passing of the Public Services Management Act in 1997 [Oireachtas, 1997]. As elsewhere the focus of the public sector from its inception was on probity, compliance, procedural justice and equity of treatment in public sector dealings. The Irish public sector reform story is one of reluctance over many years to modify public service management as recommended by both government-commissioned reviews and White Papers [Brennan Commission, 1935; Devlin, 1969; Irish Government, 1985]. Significant change in public sector management did not occur until 1994. At a meeting of ministers and secretaries of government departments that year, the Taoiseach (Irish Prime Minister) declared his determination to give the public service a new strategic focus. This became known as the Strategic Management Initiative (SMI) for the public service [Boyle, 1995]. This initiative effectively formalized what was already an emerging reform process within the civil service. One of the central tenets of the SMI was the devolution of accountability with appropriate responsibility from the centre to executive agencies [Butler, 2000].

NPM in Ireland

Delivering Better Government, together with strategies in education and health, set the strategic direction for the Public Service and the essential principles governing the required changes. *Delivering Better Government* identified the main areas for change as: delivering quality service to customers; reducing red tape; delegation of authority and accountability; improved human resource management; improved financial management and ensuring value for money; use of information technology; and improved coordination between departments. In this report, one can see many components of NPM [Coordinating Group of Government Secretaries, 1996]. The central thrust was the desire for an excellent service for government and for the public as customers and clients at all levels. The recommendations related initially to modernisation of the civil service, but recommended a widening of the SMI process to all public service bodies within twelve months. By the mid-1990s, there was support for a change in public administration from both the political and administrative stakeholders. Since then, the Irish civil and public service has undergone a process of modernization.

In Ireland, reform has mainly been pursued under the banner of the SMI, but it has also been embedded through the concept of partnership at national and organisational level. In 1987, the first national Irish social partnership agreement was born at "a time of economic crisis that helped to both galvanise a common view of the major sources of Ireland's malaise and build the will to cooperate to remedy them" [International Monetary Fund, 2004]. The Irish Congress of Trade Unions proposed a way forward based on agreement between the Government and the other Social Partners (the Irish Congress of Trade Unions, the Federation of Irish Employers, the Construction Industry Federation, and farming organisations). The aim was, through a national consensus, to plot a way out of the country's economic difficulties. In return for wage moderation there were a series of measures to stimulate

employment, to broaden the tax base to permit lower taxation of workers' earnings and commitments to improve social protections. This plan, *The Programme for National Recovery 1987–1990*, was implemented successfully and resulted in the beginning of the turning of the economic tide [Irish Government, 1987]. There have been seven successive national agreements to date [Irish Government, 1987; Irish Government, 1990; Irish Government, 1994; Irish Government, 1997; Irish Government, 2000; Irish Government, 2003; Irish Government, 2007].

What is unusual about the case of public sector management reform in Ireland is that the reforms have been supported by detailed legislative changes. The coalescing of economic and social pressures led to the Irish government giving NPM a new significance, namely through its codification in statute as "best management practice" [Robbins et al., 2005]. Unlike many other jurisdictions, the Irish government has enshrined the principles of NPM in legislation in the form of the Public Service Management Act, 1997 [PSMA, 1997] [Oireachtas, 1997]. On this occasion the structural changes necessary to support the reform of the public sector were facilitated by legislation. While Ireland may have been reluctant to pursue significant public sector management reform for many decades, it subsequently sought to ensure that the changes it promoted would be embedded for the future through their codification in statute. The governance changes that were initiated through legislation in the mid-1990s facilitated a move from a highly centralized control of human and financial resources to one of greater decentralisation and devolution of authority and responsibility, based on new accountability frameworks. Reluctance to reform was replaced by a commitment to change. The trajectory of reform was prolonged, with intense debate over decades without any significant reform, which ultimately led to an abrupt, prescriptive adoption of NPM by statute: the PSMA 1997. It was with this Act that Ireland started to lose the tag of "reluctant" NPM reformer [Robbins et al., 2005].

These reforms coincided with the identification of Information Technology (IT), in *Delivering Better Government*, as a key component in enabling the changes envisaged in the SMI and as a vehicle for achieving radical improvement to the business of government. Specifically, *Delivering Better Government* promotes the use of IT to achieve efficiency gains, to support decision-making and service delivery. The redesign of work processes is recommended in order to enhance individual and organisational effectiveness and productivity. IT is identified as a key enabler in the creation of more flexible government units and in the development of more responsive consumer-oriented services. The document introduces the notion of electronic information services and the use of the Internet to support public sector reform [Coordinating Group of Government Secretaries 1996]. The Information Society Policy Unit (ISPU) was subsequently set up in the Department of the Taoiseach in 1999. The ISPU has overall responsibility for developing, coordinating and driving implementation of the Information Society agenda. The aim of the Unit was to ensure that Ireland develops as a fully participative, competitive, knowledge-based Information Society.

V. E-GOVERNMENT IN IRELAND

E-government strategy in Ireland is encapsulated in two action plans published by Government. The first, published in January 1999, was entitled *Implementing the Information Society in Ireland: An Action Plan* (Irish Government 1999). The second, published in March 2002 was entitled '*New Connections—A strategy to realize the potential of the Information Society*' (Irish Government 2002). The first plan set out a series of actions and initiatives for the period 1999 to 2001, while the timeframe for the second plan was 2002 to 2005. Although there have been several progress reports for the 2002 plan, there has been no e-government action plan in place since the start of 2002. As such the two action plans represent the entirety of the strategic planning for e-government from 1999 to the present time.

The 1999 action plan set out a broad agenda for the development of the Information Society, which included infrastructure development, legislative change, action to encourage online business and a variety of e-government initiatives. The Action Plan recommends for example that a culture of entrepreneurship be developed in the work of development agencies in the context of developing e-commerce opportunities. Under e-government, the development of public services incorporated the Quality Service Component of the SMI initiative and introduces the notion of client-centred service delivery for the first time. The plan set out three distinct areas of activity: Information Services, Interactive Services and Integrated Services. Information services sought to ensure that all public information would be made available online through departmental and agency websites. Interactive services sought to enable online transactions with public service providers. Finally, integrated services required the rearrangement of information and service delivery around user needs through a single point of contact.

Acting in tandem with the integrated services strategy of the first action plan, the Department of An Taoiseach (Prime Minister) and the Department of Finance developed the concept of a Public Services Broker (PSB). Responsibility for developing the PSB was devolved to a special agency, known as Reach, in the Department of Social and Family Affairs who had been charged with developing an Integrated Social Services System. An Information Society Fund was established in 1999 to support the action plan. In the subsequent years to 2005 a total of €57 million was drawn down from this fund in support of in excess of 170 information society initiatives. Of this

fund, 94 per cent is estimated to have been spent on e-government projects [Comptroller and Auditor General, 2007].

In March 2002 *New Connections*, the second action plan for the implementation of the information society, was launched. *New Connections* explicitly recognises the importance of ICT in “bringing about the single most dynamic shift in the public policy environment in the history of the State” [Irish Government, 2002]. The plan anticipates a fundamental change in how the business of government is conducted and views the ability to respond to the influence of rapidly evolving technologies as key to the competitive advantage of Government. EGovernment is specifically mentioned as a opportunity to gain competitive advantage through reduced costs, higher efficiencies, better services and a customer-oriented approach [Irish Government, 2002]. The plan covered the period from 2002 to 2005, and the Government committed itself to the online delivery of all public services through a single point of contact.

New Connections highlights the key challenge of ensuring that the developments made through e-government are realised in the wider modernisation process, in particular in the context of SMI. The concept of a PSB is reaffirmed as central to the e-government strategy, particularly in the drive to deliver cross-departmental integration and the development of an organisational culture with a user-centric focus. In addition to the PSB, a number of flagship e-government initiatives were specifically highlighted in *New Connections*. These included online facilities for citizens to pay motor tax and court fines; to make applications for driving licenses and passports; and to enrol on the electoral register.

Supporting the implementation of the e-government action plans were a number of high-level structures. These included a Cabinet Committee on the Information Society, an E-Strategy Group of Secretaries General and an E-Government Implementation Group of Assistant Secretaries. The latter group was assisted by ISPU, which was established within the Department of An Taoiseach. Finally, the Centre for Management Organisation and Development in the Department of Finance had a role in the strategic direction of ICT in the public sector.

Funding for e-government initiatives was initially advanced through the establishment of the Information Society Fund. However, the Comptroller and Auditor General's 2007 report on e-government estimates that expenditure on e-government initiatives between 2000 and 2005 was €420 million. This was spread over 141 projects of which 53 per cent were completed fully live as planned, 31 per cent are still in progress and 16 per cent were classed as abandoned [Comptroller and Auditor General, 2007]. There were an additional twenty smaller or consultancy-only projects [Comptroller and Auditor General, 2007]. An examination of the Revenue on Line taxation system follows in the next section.

Case Study 1—The Revenue Online Service (ROS)

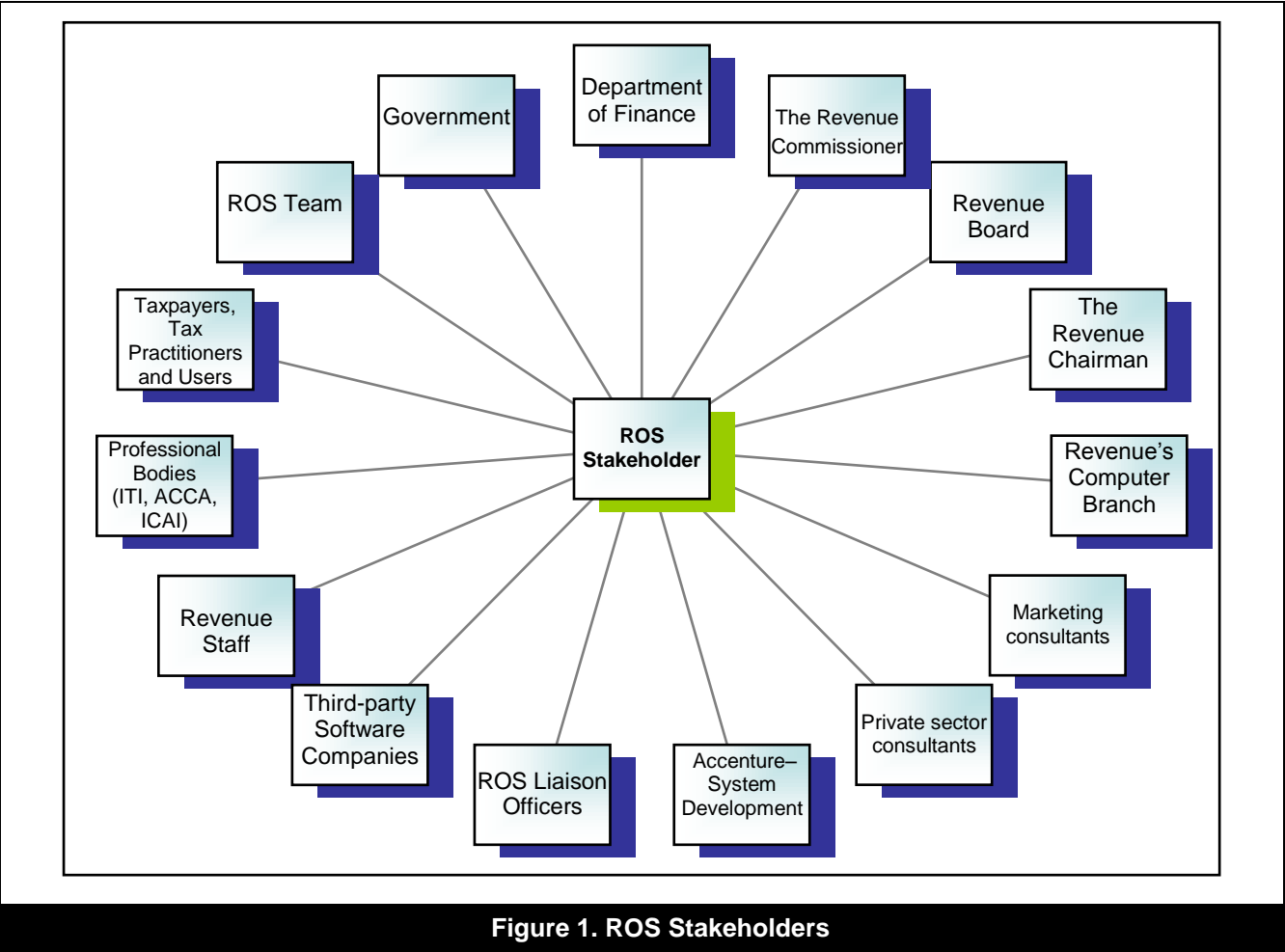
In September 2000, ROS was officially unveiled to the public as part of Ireland's e-government strategy. ROS is an interactive web-based system that allows Revenue taxpayers (initially self-employed and corporations) to file and pay their taxes online. The service quickly became one of Ireland's most successful e-government innovations and received international recognition.² Aims of ROS include a reduction in direct contact and time-consuming transactions and also an improvement in voluntary compliance and customer service. ROS has enabled large numbers of tax returns and payments to be filed electronically. In 2003, 40 per cent of self-employed returns were filed on line [Revenue Commissioners, 2004]. This had grown to 70 per cent by 2006 [Revenue Commissioners, 2007a]. The move to electronic tax return submission and payments has resulted in efficiencies and savings in costs for tax/accounting practitioners [Robbins et al., 2009].

ROS also comprises a Customer Information Service (CIS) component that allows taxpayers to check on their outstanding returns and payments for all taxes for which they are registered; this is an online service, reducing the need for telephone enquires. ROS support services provided to assist taxpayers include ROS Liaison Officers, the ROS Helpdesk and Frequently Asked Questions on the website. Revenue have also clearly stated their support and preference for electronic filing (e-filing) in their statement of higher service standards for ROS customers over non-ROS customers (see Table 2 below).

² ROS was a winner in the 2005 e-Europe awards made by the European Institute of Public Administration (IPA) which recognises innovation in e-government in EU countries. The European IPA noted that the Irish government's e-taxation system—ROS was one of the most advanced in the world. ROS also received an e-government award at the pan-European Ministerial E-Government Conference in Manchester in November 2005. ROS was shortlisted from an original 234 nominated “good practice” cases showcased at that event and was then selected as overall winner of the e-Europe Award in the “impact” category measuring the impact on, and benefits to citizens, businesses, and government. Chairman of Revenue Commissioners “Sixth Phase of the Performance Verification Process under Sustaining Progress” in *Letter to Secretary General, Department of Finance*, Revenue Commissioners, Dublin, 2006.

Table 2: Customer Service Standards: ROS versus non ROS Customers		
	ROS Customer	Non-ROS Customer
Processing of tax returns, declarations and applications	100% within 5 working days	80% within 10 working days
		100% within 20 working days
Processing of Repayments	100% within 5 working days	80% within 10 working days
		100% within 20 working days
Source: Revenue Commissioners [2007a].		

Regionalisation of the Revenue organisation coincided with the introduction of ROS, resulting in the disaggregation of Revenue into regional units. The intention of this reorganisation is that all taxes can be dealt with at local level. Concurrent with the reorganisation is clarification of regional Revenue staffs' accountability and responsibilities. Feedback on the operation of ROS is channelled through representative bodies, such as the Institute of Taxation (ITI) and the Institute of Chartered Accountants (ICAI) to those in Revenue responsible for ROS system development and modification. Ongoing consultation with stakeholders has clearly been in evidence for the development and implementation of ROS and extensive consultation continues to take place with stakeholders in ROS (see Figure 1 for complete list of ROS stakeholders).



In anticipation of a greater use of the CIS by taxpayers and of the uptake in electronic submission of tax returns it was forecast that there would be significant efficiency gains and financial savings [O'Donnell et al., 2003]. Table 3 illustrates that almost half (48.6 per cent) of all savings generated in 2006 resulted from increased use of the CIS component by taxpayers and less direct contact with Revenue staff.

Table 3: ROS Savings to Revenue 2006

Transaction Type	Total Returns -	Resource Savings €	Post/Fax Savings €	Total Savings €
Various tax forms returned via ROS	2,065,805	5,051,255	1,967,168	7,018,423
Payments	402,620	154,338	193,258	347,595
CIS Enquiries	6,037,511	6,943,138	14,715	6,957,853
Total Saving				14,323,871

Source: Revenue Commissioners (2007a, p. 59). Note: For comparison purposes, savings to Revenue in 2005 were €10.65million.

The public-sector-wide human resource management system—the Performance Management Development System (PMDS)—continues to link staff financial rewards with the achievement of measurable targets. Release of staff from manual inputting of tax returns has facilitated an increase in audit work. In 2007 over 250,000 audits and assurance checks were carried out—up one-third on 2006 [Revenue Commissioners, 2007b]. The use of ROS has grown year on year since it was launched in 2000. Returns submitted in 2006 increased by 24 per cent to 2.6 million [Revenue Commissioners, 2007a]. In 2006 the number of payment transactions made via ROS increased by 40 per cent from the previous year to 408,575 while the value of payments made on ROS increased by 37 per cent to €16.16 billion [Revenue Commissioners, 2007a]. Over seventy per cent of self-employed returns were filed electronically in 2006 [Revenue Commissioners, 2007a]. In June 2006 ROS facilities were extended to Pay-As-You-Earn (PAYE) taxpayers. Table 4 below shows the level of e-filing as a percentage of total tax filing in 2006.

Table 4: E-Filing versus Total Filing in 2006

Vehicle Registration Tax	92%
Income Tax—Form 11	70%
Corporation Tax—CT 1	56%
Employers' Annual PAYE Returns—Form 35	33%
Value Added Tax—Form 3	27%
Employers' Monthly PAYE Returns—Form 30	18%

Source: Revenue Commissioners [2007a].

From Table 4 it is clear that Revenue focus attention and resources at supporting the new electronic tax filing submission modes. In its Statement of Strategy for 2008–2010 Revenue identified the availability of a variety of self-service channels to their customers as a key output measure [Revenue Commissioners, 2008]. For the first time, Revenue intends implementing mandatory e-filing on a phased basis.

Findings—ROS

O'Donnell, Boyle and Timonen [2003] identified a number of factors that have contributed to the success of ROS: (a) corporate commitment—both within Revenue at Board level and the ROS Team; (b) clear strategic leadership—a strategy manager was appointed by the ROS Board who then assembled a team of experts; (c) fast delivery in small units—the development of ROS progressed very quickly as services were added in stages but in fast succession; (d) astute human resource management strategies—public and private sector developers worked alongside each other, in equal numbers approximately, in the same location in order to develop and deliver the ROS service; (e) funding—ROS received financial support from the Information Society Fund; (f) back office reorganisation—extensive reforms which facilitated elimination of significant amounts of manual inputting and processing took place to support the introduction of ROS; (g) consultation with stakeholders—continual consultation with both internal and external stakeholders contributed to successful implementation (see Figure 1 above for a detailed account of stakeholders); and (h) an interest in learning from the experiences of other countries—ROS sent a team to New Zealand to review their online tax service and to identify possible problems.

Overall, there is evidence of a number of Hood's [1991, 1995] doctrinal components in the ROS initiative. The initial and ongoing consultation with external stakeholders, which included accounting, professional and representative bodies, tax agents, software companies and customers is evidence of both a reshaping of organisational boundaries and of a concern with the customer and customer service. A shift in emphasis from a concern with process to a focus on a customer driven and service orientation [Boston et al., 1996; Ferlie et al., 1996; Hood, 1991; Hood, 1995a] was at the heart of the ROS initiative. The organisational boundary is no longer rigid but is characterised by a

new flexibility, which allows input from users and their agents—tax/accounting practitioners—to influence ROS development and the implementation process. Increased emphasis on performance measurement is a doctrinal component of NPM [Hood, 1991]. Quantification of benefits is a key characteristic of NPM reforms [Faucett et al., 1994]. Efficiency gains were pursued vigorously and resultant savings were quantified (€14.3m in 2006 as presented in Table 3). There is a greater emphasis on parsimony in resource use as evidenced by the reduction and in some cases elimination of manual inputting and processing of data by Revenue staff. This task has now been pushed back up the chain to tax/accounting practitioners or citizens who may submit their own tax returns electronically. Greater emphasis has been placed on output controls as staff members, relieved of manual processing tasks, have now been redeployed thus freeing staff for retraining and involvement in audit. Finally, private sector styles of management [Hood, 1991; Mc Laughlin et al., 2002] have been pursued in many NPM reform initiatives in an attempt to realise efficiency gains. Revenue launched ROS with an extensive marketing campaign analogous to a product launch in the private sector, whilst IT consultants partnered Revenue technical staff in developing the back end computer system to support ROS.

Reviewing the ROS case study using the Lau framework discussed earlier in the article allows a deeper analysis of the outcome of some of the NPM influenced aspects of the case study. Lau's [2006] framework classifies types of benefits and requires identification of beneficiaries of e-government initiatives. The following table contrasts the NPM case features with the type of benefit accruing and the outcome relevant to the beneficiary: Government and Non-Government (citizens and businesses).

Table 5: E-Government Benefits: ROS				
ROS Case Feature	NPM Feature	Type of Benefit	Outcome: Government	Outcome: Citizens & Business
Customer Information Service (CIS)	Customer focus	Direct financial benefits and non-financial benefits	Reduction in costs (see Table 3)	Higher value service: convenient access, out of hours.
Disaggregation of Revenue units—regionalisation	Structural dimension	Direct financial costs and benefits	Increased knowledge of customer	Administrative simplification, more personal contact and relationship building, one source for queries. Focus on business partners—tax/accounting specialists.
Newsletter—service updates/upgrades	Private sector style of management	Direct financial costs and benefits	Fast, low cost dissemination of information to ROS users	For citizens with tax expertise such newsletters may have benefits
Substantial reduction in manual processing of tax returns—Business Process Redesign	Private sector style of management	Direct financial and nonfinancial benefits	Reduction in inputting costs, freeing resources for retraining and greater number in audit, assurance and compliance.	Faster processing of tax returns and repayment of taxes for citizens and businesses (see Table 2). Greater focus on tax compliance for individuals and businesses.
Source: Lau [2006] adapted framework.				

The ROS initiative has been particularly successful in providing direct financial benefits to the Revenue department. The digitisation of the tax return process has resulted in significant savings in costs for Revenue (see Table 3) and also for tax/accounting practitioners [Robbins et al., 2009]. The savings have facilitated a retraining of Revenue staff and redeployment of some staff to audit and assurance. Audit checks increased by one-third over 2006 levels as evidenced earlier in the article. Revenue intend increasing the availability and usage of e-filing and payment in the years ahead, to the extent of making it mandatory for the filing of certain business tax returns.

Non-Government stakeholders have also benefitted from ROS—accounting/tax practitioners for example, now complete and file the majority of income tax returns on line, saving these groups time and resources through a more efficient transaction mechanism. The resulting redeployment of Revenue staff to audit and tax compliance areas, benefits all citizens as there are now additional resources directed towards tax assurance and compliance of all taxpayers. This provides an important nonfinancial benefit for society—greater equity and the potential for greater procedural fairness in meeting the taxation burden necessary to finance public services.

The ROS Team have updated users on system updates and upgrades using cost effective e-newsletters. This form of communication is efficiently targeted at service users, be they citizens or tax/accounting practitioners. The development and launch of this e-government initiative had as an objective the facility for individual taxpayers to file their personal taxes online. However, tax filing requires a level of professional knowledge that the taxpayer may not possess. The sophistication of ROS software and its computational abilities removes substantial risk from the tax computational calculations for tax/accounting practitioners. This reduction in risk is primarily of benefit to the tax/accounting professional. However, the citizen who previously submitted his/her tax return in hard copy form is unlikely to switch to ROS and submit the return him/herself as the penalty for an erroneous submission is significant. Professional knowledge is still required in many cases to accurately complete an income tax return. Whilst the uptake in e-filing is significant (for instance, 70 per cent of income tax returns were e-filed in 2006—see Table 4) the story behind such success is that in many cases it is accounting/tax practitioners who have benefitted from the e-filing facility. As with many public services it is difficult to measure the benefit of this e-government initiative. Whilst the citizen has benefited by increased access to information on their tax position, for most citizens professional help is still required when submitting a tax return.

Overall, the ROS initiative has resulted in significant direct financial benefits to Government and businesses, in particular those in the tax and accounting professions. In terms of e-government goals, ROS has provided substantial improvement in the quality of the service and significant financial improvements in the efficiency of the administrative operation. The increase in audit and compliance facilitated by the efficiency gains in Revenue benefits all citizens. These improvements are clearly traceable to the doctrinal NPM features outlined above. However, the pursuit of improvements to the democratic function is for the most part absent as indirect nonfinancial benefits such as suggested by Lau [2006] have not been pursued or prioritised.

Case Study 2—The Public Service Broker (PSB)

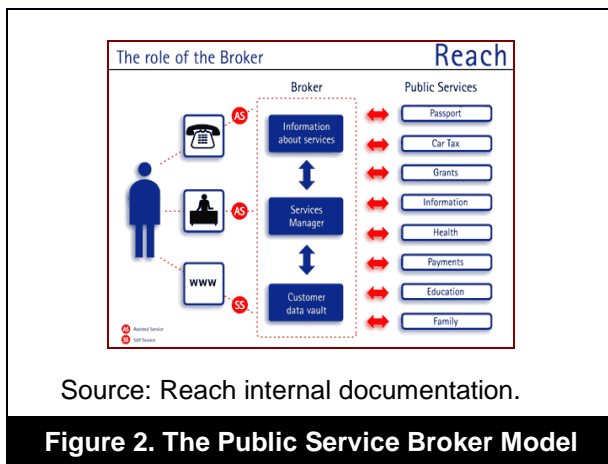
The central e-government project, identified and prioritised through the strategic plans of the Information Society and New Connections, is the Public Service Broker (PSB). This web-based portal was intended to integrate central and local government service providers from a central access point available through both online and physical channels. The concept was adopted as the central mechanism for delivering the e-government agenda, as the benefits that were envisaged for citizens included improved quality of service, time-savings, lower costs and improved process efficiency and reduced resource requirements for service providers. Ultimately the development of the PSB complemented the need to provide high quality public services and as such was firmly embedded within the original framework of the SMI [Irish Government, 2002]. In turn the portal provided the ability to integrate services provided by government service providers and restructure those services around the needs of citizens thus achieving the central ideological goal of citizen-centric e-government.

In 1999, the Reach agency was officially established within the Department of Social and Family Affairs. Reach was an executive body initially charged with developing an Integrated Social Services System (ISSS). The goal of the ISSS was to deliver efficiencies, greater accessibility and coherence in the provision of social services. The Reach agency, its name reflecting the concept of government reaching out to its customers, was originally composed of eleven civil servants seconded from a variety of Government departments, reporting directly to the Department of An Taoiseach.

During this period the Department of An Taoiseach and the Department of Finance formulated the concept of a PSB as a central tenet in the delivery of e-government services. The PSB was envisaged as a portal to provide access and delivery of integrated public services. As a result of the close alignment between the aims of the Reach agency and the objective of the PSB, Reach became primarily responsible for the development of the PSB.

The PSB was identified in New Connections as the most efficient method to providing mediated, citizen-centred services. The model of the PSB was designed to provide a mechanism to co-ordinate government service providers and to manage the various interactions with resource providers in delivering a service. The model of the PSB, see Figure 2 below, outlines the structure of this portal.

In response to a mandate to modernise resource provision, local and national agencies took the initial step in 2000 of developing individual websites, providing detailed information to citizens and businesses respectively. With a focus on customer requirements, these sites broke the tradition of distributing government information along functional lines. Also in 2000, in response to local authority requests, the Local Government Computer Supply Board (LGCSB) developed electronic forms (e-forms) for use on local authority websites. These were essentially web versions of the traditional paper-based form and enabled users to register with their local authority. However, there was no online system to process the form electronically—these initial e-forms served only to promote the accessibility of public service forms.



Central to the achievement of greater resource efficiency in government agencies was the redevelopment of e-forms into an interim PSB. In developing technical requirements for the PSB, Reach identified the need for a more efficient system of managing forms and a more accessible location for delivering forms. As a result Reach, in partnership with LGCSB, progressed the development of e-forms and enabled the provision of an interim level PSB. This development was called *Reachservices*.

In parallel with the development of this prototype, Reach produced initial specifications for the PSB and a procurement process was initiated with expressions of interest invited in 2002. Throughout this process external consultants, e.g., Cap Gemini, were employed by Reach in key technical roles such as technical architect and systems

analyst. Bearing Point was finally selected to build and deploy the PSB in February 2004 with an initial delivery date of August 2004 and an estimated design and build cost of €13 million. The interim PSB, developed successfully by LGCSB was abandoned by Bearing Point in favour of developing an alternative system. Final implementation of the PSB was delayed until December 2005, sixteen months behind schedule and costing €37 million, with an annual maintenance cost of between €14-15 million [Comptroller and Auditor General, 2007].

Currently, the PSB is mainly used as an information base, acting as a single point of access to information on the full range of government and public services, with approximately fourteen hundred pages, providing some interactive public online services that include a look-up, online forms and downloadable forms section. It provides a limited range of services compared to what was originally envisaged, the most utilised being an identify authentication facility which allows PAYE workers to avail of services provided through the ROS system.

After the launch of the system in 2005 the total number of visitors was 18,000, which compares with over 2.5 million for the Citizen's Information website in the same year. A substantial increase in registrations was recorded in early 2006, coinciding with the launch of the ROS service and the necessity for users to use the authentication facility provided through the PSB in order to access the income tax facilities. The average number of views per visitor has remained fixed through to 2007 at four to five per visit, below the Citizens' Information website. In 2007, the total number of registered users was approximately 250,000 (Comptroller and Auditor General 2007).

Government departments and agencies have been slow to participate in the PSB. According to data provided by the Auditor General, the extent to which the PSB has been used is very limited, with the majority of Departments/agencies reporting that the PSB is not appropriate to their current needs [Comptroller and Auditor General, 2007]. Critically, the online citizen-to-government payment system provided through the PSB infrastructure, is not currently being used by any Department or agency. Many Departments have pursued their own online initiatives. Local agencies in particular have suffered from a lack of localised development to support the backend processing of electronic services necessary to integrate with the PSB. IT managers in these regions cited a significant lack of involvement from Reach in identifying and resolving local organisational issues.

Findings—PSB

The Reach initiative is similar to ROS with regard to certain NPM components: Reach purported to have a focus on the customer; there was a clear need for structural change to support process change; private sector styles of management were in evidence in the outsourcing of the PSB to the private sector; and a consistent overall focus on achieving efficiencies and faster processing times through integrated and online service provision.

The restructuring involved in Reach was extensive from the customers' perspective. Whilst a customer-centred focus, a key feature of NPM, characterised the Reach initiative, it proved difficult to achieve for a number of reasons. It involved a change in focus from several different providers of public services to a single focus on the customer without any specific quantifiable benefit for the service providers. Reach required a substantial change in internal information flows within government departments and the manner in which data was held. It also required service providers to connect with an integrated IT infrastructure, part of which was a centralised data vault. The challenge of achieving this on a technical and organisational level proved insurmountable.

Development of the PSB required an unprecedented level of cooperation and integration between a number of large and powerful government departments and local agencies. However, the absence of a clear command and control structure to advance the project and a singular lack of stakeholder engagement resulted in very limited support and

usage of the PSB [Hughes et al., 2006]. Local authorities had little contact with Reach and were not included by central government in the development of e-government strategy.

We were never consulted over the drafting of the New Connections strategy ... it was presented to us as a "fait accompli" during a presentation at Dublin Castle. Also, our concerns over technical and procedural issues have not been addressed—I have only met with Reach once since its initiation to discuss this issues.

Director of IT, Urban County Council

As a result local authorities have become resistant to certain initiatives, in particular Reachservices, and believe that senior management were interested only in presenting services online to satisfy EU benchmarking targets and were not supportive of initiatives that sought to e-enable backend processes. In order to provide more sophisticated services through the PSB, local authorities recognised the need for organisational restructuring to support the required inter-agency cooperation. However, their inexperience in this endeavour coupled with a lack of central government support hindered progress.

We have no history of departments collaborating in the provision of services within XYZ County Council or with any other service provider. We have had no support or direction from central government ... we cannot even get agreement on a common platform for our existing systems to communicate. I believe there is a lack of political will to force through some of the institutional changes needed for agencies and departments to work together.

Director of IT, Rural County Council

These factors exposed the weakness of implementation agencies and especially the Department of the Taoiseach, to effect interdepartmental change. As one senior civil servant in the Department of the Taoiseach remarked:

We quickly realised that we do not have the authority or indeed the right, to force Departments or agencies to follow strategic goals set by my Department.

Director of ISPU, Department of an Taoiseach

As the agency charged with brokering agreements, Reach further failed to include government departments, local agencies or indeed the citizen in either the development of strategy for the PSB or involve stakeholders in the subsequent challenge of process development.

The concept underpinning the PSB required significant process restructuring in order to generate the expected benefits to citizens and efficiencies to service providers. However, given the innovative nature of the proposed project, precise, quantifiable benefits were not identified, and perhaps according to a senior civil servant in the Department of the Taoiseach were not identifiable.

We found it very difficult to quantify the outcome, as there was no precedent from which to predict the likely cost or effort required.

Director of ISPU, Department of an Taoiseach

This position is recognised in the Auditor General's report that specific benefits may have been difficult to identify given the unprecedented and innovative nature of the project. Nonetheless, this project presented particular performance measurement challenges. The evidence in this case resonates with the difficulties noted earlier in the paper by Faucett and Kleiner [1994] that, where there is an "onus on the professional public sector manager to deliver a quality product efficiently," and that, without performance measurement, this is unlikely to happen. Overall, a number of factors have collectively contributed to undermine the development and implementation of Reach and have resulted in very poor levels of take up of the PSB by Government departments and agencies. These include a lack of stakeholder engagement, technical impediments that remain at both central and local level and the inability to provide a visible quantification of benefits to individual Departments involved in the Reach project.

The outcome of the PSB initiative falls significantly short of the relative successes seen in the ROS case study. The formidable organisational, managerial and technical challenges have resulted in the achievement of very few positive outcomes. Nonetheless, it is useful to analyse the strategy and intention of the PSB case using the Lau framework. There are clear recognisable components of NPM ideology in the rhetoric of the PSB and the strategy is interesting in two respects. First, the focus is consistently on whole system reform as opposed to single departmental rationalisation, as is usually the case in NPM influenced initiatives. Secondly, many of the benefits of the PSB were intangible, nonfinancial benefits which were consequently difficult to fit within a performance

measurement framework. Indeed, although core NPM components are visible, the PSB had a broader perspective and intended to create value at different levels within Government and society in general.

Table 6: E-Government Benefits: Reach

PSB Case Feature	NPM Feature	Type of Benefit	Outcome	
			Government	Citizens & Business
Citizen-centric Service Orientation	Customer Focus	Direct Financial/ Nonfinancial Costs and Benefits	Reducing costs of service delivery, Increasing value of service	Higher quality service, improved personalisation (focus on citizens) Improving equity through multi-channel service delivery
Process Re-engineering/ Reorganisation	Structural Dimension	Direct Financial Costs and Benefits	Increasing value of service, Achieving synergies across service channels	Administrative simplification, higher value service through stakeholder engagement (focus on business partners)
Outsourcing	Private Sector Style of Management	Direct Financial Costs and Benefits	Increasing value of services Reducing costs through private partnership	Higher value service
Process Integration	Emphasis on Efficiencies	Direct Financial Costs and Benefits	Reducing costs Freeing resources Faster processing time	Single point of contact

Source: Lau [2006] adapted framework.

The strategy underpinning the PSB case study contains elements of both direct financial and nonfinancial costs and benefits for the government and a range of stakeholders. The citizen-centric service orientation sought to provide higher value services through the personalisation of data, improved access and equity through the use of multiple service channels. The PSB explicitly included multiple service channels in its architecture as it was recognised that many users of government services are unable for a variety of reasons to access the Internet. The Department of the Taoiseach remarked in this context that better quality service provision often costs more as a result of this. However the goal of greater access to government services—via walk-in facilities, phone-in and Internet—was valued higher in equity terms than potential cost savings through just Internet-based services. The extensive challenge of process reengineering required for the PSB sought to free resources, create synergies across service channels and ultimately promote the sharing and reuse of data through the citizen data vault and the e-forms engine. The restructuring of service provision was intended to provide a more citizen-centric experience for users and as a consequence, reduce the administrative cost of availing of services and improve the quality of service provision from the government agency regardless of the service channel. Achieving process rationalisation through the use of IT was intended to achieve significant efficiency gains for government agencies, thereby reducing costs and freeing resources. The decision to outsource to the private sector was made primarily to benefit from cutting edge technical expertise not held within the public sector and is a common technique used by government agencies to provide sophisticated technological solutions in a cost effective manner [Ya et al., 2007].

VI. DISCUSSION

Through the development of the SMI initiative in 1994 to the setting of the agenda for e-government in 2002, the emergence and embedding of NPM ideas was visible. The importance of restructuring and integration, both organisational and work-process related; the development of a customer focus; the use of private sector styles of management; and the expectation of significant efficiency and productivity gains through better use of IT. The role of IT and subsequently the Internet clearly became a core component in the modernisation process and as a consequence was shaped by the ideology of NPM that was permeating the Irish public sector. NPM doctrinal components underpinned the reform context and objectives for e-government strategy and significantly influenced the intentions and design of subsequent e-government projects.

While there is evidence of NPM in both the ROS and Reach initiatives, the outcome of each has been markedly different. The following section briefly contrasts the influence of NPM in each case study and discusses the resulting outcomes.

The ROS project was bounded in terms of its limited impact on other public service departments. It had a visible command and control structure that facilitated delegation of responsibility and accountability for results—both clear consistent components of NPM initiatives. The launch of ROS involved the digitisation of an existing tried and tested paper-based service. The ROS project was also approached as a series of incremental and successive steps with a period of review and organisational learning following the embedding of each component. Finally, ROS differs from other public services in the extent of change that the organisation deals with on an annual basis. Each annual Budget announcement by the Minister for Finance and each subsequent Finance Act, involves addressing and dealing with change. For Revenue staff, change and adaptation are a constant. These features of Revenue contributed in part to the ease with which the ROS initiative was adopted and implemented.

In contrast to ROS, the Reach initiative attempted to integrate service provision for the customer unlike the bounded single service (assessment and collection of taxes) provided by ROS. Also, a pre-existing service did not exist in the case of Reach. Development of the new service required an unprecedented level of co-operation and integration between a number of large and powerful government Departments and local agencies. Further, there was a clear absence of executive command and control to govern and advance the project. This lack of leadership undermined the ability of Reach to gather the necessary interdepartmental support despite being located in the Department of the Taoiseach.

By helping to establish a culture of modernisation within the public sector and influencing project design around efficient customer-centric services, NPM played a key role in the success of the ROS initiative. The manner in which NPM was employed had a significant impact on the failure of the PSB in that it purported a radical systems design without supplying the necessary managerial structures and techniques to manage cross-departmental change within the broader public sector. While NPM has helped to achieve a level of success in e-government implementation, evidence from this study suggests that this has been mainly confined to intradepartmental change. At the interdepartmental level, the positive impacts of NPM influence the project design and a general impetus towards change, but it does not provide structures and techniques that are suited to manage more radical change in the public sector, particularly those involving whole system change. The PSB can thus be seen as an excellent example of an integrated approach to e-government where failure to anticipate and manage the complexity of administrative work has resulted in widespread failure to deliver public services—a point echoed by others [see Cordella, 2007].

The Reach initiative exposes another fundamental impact of NPM driven policies. The development of an NPM culture, embedded through comprehensive legislative changes, has encouraged a focus on results and measuring outcomes that in certain cases has emphasised an efficiency in management over the need for effectiveness in the delivery of public services. In the case of the Reach project, the impact of this was the difficulty in specifying the expected benefits from the social and public benefits generated by the PSB. As a consequence, firm commitment to the project was absent as a return on investment could not be specified. The inability to deliver projects intending to improve the effectiveness of public services serves to highlight the dangers of transforming public service bureaucratic organisations into ones based on market-orientated mechanisms of management and control that emphasise efficiencies in the measurement of outcomes [Cordella, 2007].

Achieving Successful E-Government

Accounting for unquantifiable benefits is a difficult task but an essential one to appreciate in the context of achieving e-government goals [Commission of the European Communities, 2003]. Lau [2006] provides a thorough account of costs and benefits for e-government and in doing so highlights the broad range of e-government goals. In line with definitions of e-government these range from quantifiable initiatives to reduce costs to intangible benefits aimed at improving democratic processes. From the perspective of Reach, NPM was clearly ill conceived to provide a framework for performance measurement mechanisms that included social and public values. Considering the ROS case study there is also a clear preference for developing services that deliver efficiency gains.

ROS consistently highlighted the customer service concept as a fundamental strategic component and actively sought to divert transactions to the online channel in order to gain efficiencies and in conjunction define and serve a preferred customer. It is clear from the efforts made to engage with the customer that ROS have identified tax and accounting professionals as their key customer focus. This stakeholder group has undoubtedly benefitted most from the ROS initiative, both in improved procedural efficiency and in more easily meeting general tax-filing requirements. As noted by Walker [1991], groups vie to define themselves as the major recipient of government services and benefits; in this case the tax professional groups are well organised, resourced and represent a powerful voice to influence the development of this public service for their own benefit. From the perspective of the citizen, however,

ROS has not improved the transparency or usability of the taxation system by providing appropriately targeted online support suitable for the inexperienced user. Existing research in the area of citizen demand for e-government points to a preference for face-to-face service delivery, especially when user knowledge regarding the service, or the entitlement of the citizen, is low [Muhlberger, 2005; Streib et al., 2006]. Indeed, in the case of ROS, management have actively sought to reduce the level of direct contact with Revenue staff. The need for better quality services delivered in a traditional manner is reinforced in the context of Ireland's low broadband penetration rate and poor levels of Internet or computer usage in households, both of which are well below the OECD and EU averages. In line with findings from Aberbach and Christensen [2005] this has serious implications for the fair distribution of benefits in society and in the context of NPM reform, exposes the pressure public agencies face in retaining democratic values of equality and impartiality in an environment characterised by market-based mechanisms [Cordella, 2007]. It further questions the extent to which NPM reform initiatives are suitable management models for achieving e-government success as envisaged by the EU—including the main goals of efficiency, quality and improved democratic processes.

VII. CONCLUSIONS

This article analyses certain doctrinal components of NPM in an e-government context: restructuring, a customer focus, use of private sector styles of management, performance measurement and an active search for efficiencies, in an effort to show how each has impacted the implementation of two sample e-government initiatives. The findings show that in Ireland the e-government change agenda was preset by NPM doctrines, e-government policy was heavily influenced by NPM practices and that the design of certain projects manifested the adoption of NPM ideas. The article argues that from the perspective of e-government goals as defined by Lau [2006], NPM influenced both the success and failure of e-government initiatives in Ireland.

NPM offers a bridge between the visionary level and the operational level by importing private sector management structures and practices to operationalise the implementation of NPM ideas in parts of the public sector. In Ireland, NPM influenced the modernisation agenda, which in turn shaped e-government initiatives. Importation of such structures worked well in the case of ROS. The command and control structure in Revenue already supported an effective public sector organisation and was applied to the ROS initiative. However, in Reach, these command and control structures were absent. The result was a lack of momentum, an absence of a champion to drive the required changes and a difficulty in quantifying the benefits to the multiple stakeholders involved. This study, therefore, identifies many inhibiting factors in the implementation of e-government. The limitations of NPM in particular are most visible in the challenge of implementing cross-departmental initiatives and also in its apparent inability to comprehensively account for social or public values in service delivery initiatives.

Implications from this study suggests certain conclusions: it is clear that there needs to be a more sophisticated appreciation of the unquantifiable benefits of e-government, not only of the benefits that lead to competitive advantage or procedural efficiencies but of those that are conceived for the public good. Second, NPM is ill suited to advise or guide government agencies charged with large scale implementation projects and similar to other studies, the greater the level of sophistication and complexity the greater the risk of failure. Finally, there is a strong tendency among government departments, influenced by a mandate to achieve efficiencies, to identify and prioritise a preferred customer and to show efficiency gains. Although this approach may achieve efficiency gains, which can be redirected to serve the public good, there is a fundamental concern that the tradition of impartiality and social equity in the public sector is diluted with resulting adverse consequences for those marginalised or disadvantaged in society. Adopting an approach that sufficiently accounts for and prioritises public values, as well as strategies that seek to gain efficiencies, must be a priority for governments as the program for e-government evolves.

VIII. LIMITATIONS AND FURTHER RESEARCH

This study has exposed the potential for inequality of access in the strategy and implementation of certain e-government projects in Ireland. However, we acknowledge that this argument could be further substantiated through the inclusion of citizen surveys as part of our data collection. We have used national statistics as a surrogate for levels of Internet access and computer usage; however, the precise usage intentions and perceptions of the citizen is an important element in progressing this debate. User perceptions and antecedents to usage of e-government services have been the subject of numerous studies [Gilbert et al., 2004; Kolsaker et al., 2008; Muhlberger, 2005; Streib et al., 2006] and particularly in the context of studying the influence of NPM policies, are an important area for further study.

This article has proposed a method for identifying NPM elements within e-government projects and analysing to what extent these practices have influenced the resulting success of these initiatives. This approach could be applied to case studies from other countries to compare results and increase understanding of how NPM influences e-government implementation. The projects chosen for this study increase the applicability of this approach, as the

most common types of e-government projects in developed countries usually involve reform to taxation services and the development of a citizen-centred portal. Comparative cross-country case studies involving e-government initiatives are quite rare, however, and this is certainly a potential area for fruitful further research.

There are two clear implications for practitioners resulting from this study. First, the whole system approach to reform exposes the danger of underestimating the level of complexity involved in the reform agenda. In such a heterogeneous context, the idiosyncrasy and autonomy of public agencies underscores the difficulty in implementing a single system intended to meet the needs of disparate stakeholders. Recognition of the uniqueness of agencies must be prominent in implementation strategies. Following from this, the subsequent acceptance of reform proposals must be made attractive to potential participants, through the presentation of clear and identifiable gains for involvement. Creating an environment that enables and rewards change is critical to gain support, but, as seen from the narrow focus of the NPM practices in this study, this effort must be able to account for a broader view of what creates public value.

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